

REMARKS

Claims 1 to 18 and 20 to 44 are now in this application.

New formal drawings are submitted herewith, which should be in compliance with the rules of practice.

Enablement Issues

Claims 1 to 41 stand objected to under 37 C.F.R. § 1.71 because the specification does not set forth a computer program listing. Reconsideration of this objection is respectfully requested for the following reasons.

While it is permissible to submit computer program listings, the submission thereof is discretionary with the Applicant and is not a requirement, either under 37 C.F.R. § 1.71 or under 35 U.S.C. § 112, first paragraph. The standard for enablement is whether one of ordinary skill in the art would require more than routine experimentation in order to practice the invention from the materials disclosed. With respect to the disclosure of the present invention, it is respectfully submitted that the block diagrams and description in the specification are sufficient to enable a programmer to develop the software for operating the subject system with no more than routine experimentation. The Examiner's attention is respectfully directed to MPEP 2106.02, which sets forth the criteria for disclosing computer-related inventions. The Examiner will note that this section of the MPEP and the cases cited therein clearly establish that the requirements for enablement do not require a program listing, but merely a block diagram in sufficient detail to would enable one of ordinary skill in the art to practice the invention with no more than routine experimentation. Applicants

respectfully submit that this standard is met by the disclosure of record, and that no program listing is required in order to satisfy this standard.

Furthermore, it is clear that in the relevant art to which this invention pertains that program listings attached to the specification are the exception, rather than the rule. This is evidenced by the cited prior art of record in the application.

In summary, if the Examiner persists in this objection to the disclosure under 37 C.F.R. § 1.71, he is respectfully requested to set forth reasons why the present invention could not be practiced by one of ordinary skill in the art with no more than routine experimentation.

Second Paragraph, § 112 Issues

Claims 1, 24, and 41 stand further rejected under 35 U.S.C. § 112, second paragraph for containing antecedent basis problems, specifically in claim 1 and claim 24. By this amendment these antecedent problems have been corrected. Accordingly, it is respectfully submitted that claims 1 to 41 are all now in full compliance with 35 U.S.C. § 112, second paragraph.

Patentability - Prior Art Issues

Claims 24 and 41 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Borgato. Reconsideration of this rejection is respectfully requested for the following reasons.

Before addressing the specific claim language of claims 24 and 41, which distinguish over Borgato, it may be useful to summarize the essence of the present invention covered by the claims of record. Prior to development of the electronic

trading system and method of the present invention, convertible security markets were not automated to the extent that other equity markets were automated for comparing securities and executing trades. Convertible securities presently are held in positions which are hedged in one form or another, and well over 60% of the trading volume is affected with a "contingent" transaction (a transaction in which another security is traded or monitored contemporaneously). The present invention has developed a framework for a system and method that satisfies a need in the art, which will exploit this convertible security market, and other contingency based markets like risk arbitrage, ADR's, pairs, and option.

The system of the present invention facilitates contingent or conditional trading. It provides real time market data and communication links between subscribers. It makes possible the monitoring of securities of various types, the receiving of market data, the entering and executing of orders in an order book, the negotiating of trades against other "orders" in the book, and the routing of the orders to various exchanges or external data sources. Examples of these external data sources are; the New York Stock Exchange (NYSE), NASDAQ, American Stock Exchange (AMEX), and the Pacific Stock Exchange (PSE) through such access providers as DOT, ITS, or SelectNet.

A common example of a contingent comparison of market data and an associated trade is as follows:

A convertible bond trader wishes to advertise that he would like to purchase 50 ABC bonds at a price of \$102, and coincidentally sell 2,000 shares of ABC common stock at a price of \$19, or the economic equivalent thereof. He is willing to accept this

transaction for 30 minutes; he would like the system to attempt to use other exchanges in its processing; he would like the offer to immediately expire in the event that the common stock trades above \$21 or below \$17 during the life of the order; and he would like the order to be viewed by all subscribers to the trading system. Also, he does not wish to execute any part of the trade if the portion executed is less than 25 bonds. All of these various parameters are represented by algorithms, and these algorithms have constraints and conditions as set forth above that collectively represent a willingness to transact. The price of the algorithm is the dependent variable within the constraints, and in the example above the price of another security (the ABC common stock) is an independent variable of the algorithm related to the price of the convertible bond through the terms of the algorithm. Accordingly, in the example illustrated above, the contingent trade or, comparison, of diverse securities is achievable in an automatic fashion by the claimed system of the present invention.

In contrast to this, the system disclosed in Borgato is not for making contingent or conditional trades, but rather is simply an electronic trading system for diamonds (a single commodity) wherein the price of the diamond, the weight of the diamond, and the quality of the diamond are compared in various bid and sale requests. The bid and sale information is sorted and displayed with the best price for each given weight highlighted.

The system of Borgato includes a computerized system for comparing diamond prices and quality, wherein the host processor compares the price to determine the lowest offer price for a stone offered in a category position of an array for the lowest

determined offer price, and assigns that stone's data to a primary offer position in the array category. However, Borgato does not disclose a system for comparing and trading diverse types of items or securities as contingent transactions.

More specifically, turning to the specific language of claim 41, the system Borgato does not meet the limitations that the algorithm, which defines the constraints and conditions that represent a willingness to transact includes "a price of another security as an independent variable". Accordingly, Borgato clearly does not anticipate the language of claim 41. Furthermore, claim 41 has been amended to recite that "are of the conditions being the requirement that another security is tradable contemporaneously as a contingent trade". This provides additional focus as to how claim 41 distinguishes over Borgato.

With respect to claim 24, although Borgato does display price information with respect to diamonds for sale on an international market and assigns known data to a primary offer position in the array of displayed information, it does not do this on a continuing basis as new information related to other factors is input to the system. In other words, it does not continuously shuffle or rearrange this data in response to contingent factors, as does the system of the present invention.

Turning specifically to the language of independent claim 24 and new dependent claims 42, 43, the last paragraph recites:

"a sorter that resequences the orders in real-time in the display field as each order is received to reflect changes in the relative favorability

of the orders responsive to changes in price of said another security/item
as the independent variable”

Borgato does not dynamically sort in this fashion responsive to contingencies. Accordingly, the system of Borgato also does not meet the terms recited in claim 24 of record, or dependent claims 42, 43.

Claims 1 to 8, 10 to 23, and 25 to 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Borgato in view of Broka et al. Reconsideration of this rejection is also respectfully requested for the following reasons. The secondary reference to Broka et al. cited by the Examiner discloses a system for trading bonds through an Electronic Communication Network (ECN). However, there is no disclosure in Broka et al. for the contingent trading of bonds or diverse securities wherein the price of one security is an independent variable of the algorithm defining the trading conditions. Accordingly, Broka et al. does not supply the teachings missing in Borgato set forth above regarding claim 41 and, therefore, the teachings of Borgato and Broka et al., taken either singly or in combination, do not disclose Applicants' claimed invention. Claim 1 distinguishes over Borgato because it contains the same distinguishing recitations as claim 41, supra.

Furthermore, there is simply no motivation for combining teachings of the diamond trading system of Borgato with the bond trading system of Broka et al. Only hindsight would provide the motivation for combining the teachings of these two patents from what is clearly non-analogous art.

Claim 9 stands rejected under 35 U.S.C. § 103(a) over Borgato and Broka et al. in view of Garber. This rejection is respectfully traversed. Garber allegedly discloses a system for selling, sell short orders. However, Garber does not supply the teachings lacking in Borgato and Broka et al. Therefore, combining Borgato, Broka et al., and Garber does not result in Applicants' claimed invention.

Referring in more detail to Borgato, the summary of the description of the method described therein is a "multidimensional category-matrix" where each category can be thought of as a different set of "items" for sale. Borgato contemplates the entry of new stones (which are then categorized) and placed into a multidimensional matrix where each cell is a different category. The best offer and the best bid for each category is displayed to users not unlike the best bid and best offer being displayed by a typical securities exchange. When a new bid is entered for the category it is compared with the lowest offer in an attempt to effect a transaction, then, if there was not a match the bid is placed in an array with the other bids and re-sorted such that the highest bid is again displayed. An offer to sell a diamond can be entered into the system by users; the offer is categorized and the price placed into an array within the category; the array of offerings within that category is then sorted and the lowest price is then displayed. Borgato has essentially categorized away all of the meaningful differences between the tradable stones by increasing the granularity of categories and applying a trading process and display process at the lowest level.

The real essence of the Borgato patent is its method of categorizing diamonds so that the diamonds within each category can be treated like fungible property. If

viewed in the context of the present invention, each category in Borgato could be thought of as a different issue of securities in Applicants' system. Borgato then applies fairly typical electronic exchange routines (price/time priority, order matching, order cancellation, order change, etc.) to each category creating an orderbook for each category with the combined result being a more efficient marketplace for diamonds because the diamonds are theoretically traded as fungible property. However, Borgato does not contemplate the changing of a bid or offer due to outside influences such as the change of any of the above characteristics over time like an underlying security price would in Applicants' claimed system. Had Borgato said that the price a buyer is willing to pay for a stone is algorithmically tied to the best bid price of diamond(s) within another category (such as the highest grade in that weight category with the same cut and cut grade) <<and that a diamond within that category must be purchased for each one sold in the initial category >> then Borgato would be applicable. But Borgato's summary is a description of a complex categorization and the implementation of a simple exchange on each category, while Applicants' claimed invention revolves around a set of simple and predefined fungible items (bonds, items, categories) and the implementation of complex trading terms on those items through a real-time electronic interface. The present invention compares the terms of the transaction and Borgato's description centers on comparing the items to be traded.

Another way of looking at the differences between Borgato and the present invention is to analyze the output on a respective trader terminal. Borgato displays several examples where the majority of the output describes the diamond being offered

for sale and a list of the diamonds with similar characteristics along with their prices, where the only terms of a transaction being simply the payment of a specified sum with optional escrowing and category verification. The output in Applicants' invention begins with a specified security or item, the assumption that the items are fungible and the majority of the display is used to specify the terms under which a buyer or seller will trade, without escrowing and without verification of the item as fitting within a category (see Borgato Figs. 6 to 10 as compared to Applicants' Fig. 4).

Summary

Applicants' implementation of an exchange and its preferred embodiment involves the integration of three types of orders as viewed by user terminals, three types of orders as transmitted to the user terminals, and three types of orders within a trade engine or exchange for each security: 1) A very simple order for an item, either buy or sell, at a user specified price to be displayed as such, transmitted as such and traded as such with various optional contingencies, 2) an order to buy or sell an item at a price which floats up and down during the time the order is "in-force" where the amount the price floats up and the amount it floats down is driven by an algorithm where the price of another item is an independent variable to be displayed as such, transmitted as such, and traded as such, with various other optional contingencies, and 3) an order to buy or sell an item at a price which not only floats according to an algorithm but must also be traded with a specified quantity of another item to be displayed as such, transmitted as such, and traded as such with, various optional contingencies. The optional contingencies in this case relate to terms of a trade like a

cap on the price paid for floating price orders, a collar within which the independent security must trade before any transaction is possible, a minimum quantity acceptable, and "time-in-force", etc.

If all of the orders on Applicants' system were of type 1, optional contingencies or not, the system would look, act and feel the same as virtually any other electronic exchange (the order "I'll pay \$X if you will sell it to me there" of order type 1.) But Applicants' invention integrates "floating price orders" of type 2 in the display, transmission, and trading of orders on a real-time basis which is not contemplated in Borgato, and/or the floating price orders stipulating a contemporaneous trade of type 3 on a real-time basis which is not contemplated in Borgato, with the "fixed price" orders of type 1 which are described in several descriptions of exchanges including Borgato and Broka et al. The display of these three order types is sorted in real-time, re-displayed, and re-sorted as the independent variable changes.

Borgato contemplates a re-sorting upon the execution of a transaction and the entry of a new order of items within a category as does Broka et al., but they do not contemplate a re-sort for factors which could impact the value of diamonds (or bonds) because they do not envision an order-type that is sensitive to prices of other items like an index or the price of cutting equipment, or mining equipment, or wage rates paid in South Africa. Borgato describes a categorization to attain fungibility and a simple exchange based upon a single sort of the fungible items. Applicants' do not employ a categorization to attain fungibility, the items are assumed to be fungible; Applicants'

invention manages the display, transmission, and trading of an array of complex stipulated terms under which an order can be executed.

Stated still another way, the trade engine in Borgato does not have to work very hard. If a new order is entered, it compares the order to the best offering or bid and notifies the users that a trade has occurred if the prices match. Applicants' trade engine must compare new orders but must be sensitive to ongoing changes to underlying securities prices and quantities, if the price of an underlying item moves to the point where a trade can take place it may be required to calculate, generate and send an order to an external exchange to purchase or sell an amount of underlying securities, wait for the result, calculate the execution prices and quantities from the result and notify the users.

Clearly Borgato describes a static representation of an order book and a static trade engine where the representation, and trading of items on the orderbook remain unaffected by changes in the price of other goods or services.

For the foregoing reasons, reconsideration of the rejections of record is respectfully requested and an early notice of allowance is earnestly solicited.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No.

Appl. No. 09/359,686

02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Submission of Formal Drawings

<p align="center"><u>Certificate of Transmission</u></p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail in an envelope addressed to:</p> <p>Commissioner of Patents and Trademarks, Washington, DC 20231</p> <p>Signature: <u>Anthony L. Birch</u></p> <p>Printed Name: <u>Anthony L. Birch</u></p> <p>Date: <u>1/24/01</u></p>
